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**AMENDMENT TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (CURRENTLY AMENDED) A method of determining a source of emissions, comprising the steps of:

positioning a sensor array of emission sensors in spaced relation at fixed locations about a facility;

monitoring changes in emission readings from the sensors and a direction of those increased emissions; and

performing a spatial temporal emission concentration analysis to identify a source of emissions where the source of emissions is considered as a centroid and lines drawn from sensors detecting increased emissions in the direction of the increased emissions are assumed to cross at the source of emissions.

2. (ORIGINAL) The method as defined in claim 1, including a further step of supplementing the sensor array of emission sensors at fixed locations with portable sensors.

3. (CURRENTLY AMENDED) ~~The method as defined in claim 1, including a further step, when monitoring outdoors, of~~ A method of determining a source of emissions, comprising the steps of:

positioning a sensor array of emission sensors in spaced relation at fixed locations about a facility;

monitoring changes in emission readings from the sensors; and

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performing a spatial temporal emission concentration analysis to identify a source of emissions;

the spatial temporal emission concentration analysis including data relating to wind speed and direction ~~in the spatial temporal emission concentration analysis.~~

4. (ORIGINAL) The method as defined in claim 1, the sensors being electro-chemical sensors.
5. (CURRENTLY AMENDED) The method as defined in claim 1, including a further step of superimposing ~~[[know]]~~ known emission concentrations upon the sensors during a monitoring cycle to enhance sensor sensitivity.
6. (ORIGINAL) The method as defined in claim 1, including a further step of superimposing a gas compound that will react with the emission concentrations and the sensor will measure the reaction products as a way to amplify or isolate the signal from the gas of interest.
7. (ORIGINAL) The method as defined in claim 1, including a further step of superimposing a gas compound that will react with a gas that causes interference as a way to remove the interference and amplify or isolate the signal from the gas of interest.
8. (ORIGINAL) The method as defined in claim 1, including a further step of superimposing a gas compound that will coat the surface of the sensor with reaction products that make the sensor hyper-sensitive or hyper-specific to the gas of interest.
9. (CURRENTLY AMENDED) The method as defined in claim 5, including a further step of varying the superimposed ~~[[know]]~~ known emission concentrations to verify sensor calibration.
10. (ORIGINAL) The method as defined in claim 1, including a further step of using emission specific filters during a monitoring cycle to isolate the sensors sensitivity to emissions of interest.

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11. (ORIGINAL) The method as defined in claim 1, wherein multiple redundant sensors are used to improve accuracy and identify sensors with erroneous readings.
12. (ORIGINAL) The method as defined in claim 1, wherein multiple sensors are tuned to measure different gases.
13. (ORIGINAL) The method as defined in claim 1, including a further step of providing a humidity module to maintain sensor operation at an ideal operational humidity level.
14. (CURRENTLY AMENDED) A method of determining a source of emissions, comprising the steps of:  
  
 positioning a sensor array of electro-chemical emission sensors in spaced relation at fixed locations about a facility, the sensor array including redundant sensors to improve accuracy and identify sensors with erroneous readings;  
  
 monitoring changes in emission readings from the sensors;  
  
 using emission specific filters during a monitoring cycle to isolate the sensors sensitivity to emissions of interest;  
  
 superimposing known emission concentrations upon the sensors during the monitoring cycle to enhance and verify sensor sensitivity; and  
  
 performing a spatial temporal emission concentration analysis to identify a source of emissions, the spatial temporal emission concentration analysis including data relating to wind speed and direction as an indicator of a direction of the source of emissions.
15. (CURRENTLY AMENDED) The method as defined in claim 14, including a further step of supplementing the array of emission sensors at fixed locations with portable sensors.

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16. (CANCELLED)
17. (CURRENTLY AMENDED) The method as defined in claim ~~[[10]]~~ 14, including a further step of varying the superimposed ~~[[know]]~~ known emission concentrations to verify sensor calibration.
18. (CURRENTLY AMENDED) The method as defined in claim ~~[[10]]~~ 14, including a further step of providing a humidity module to maintain sensor operation at an ideal operational humidity level.
19. (CANCELLED)
20. (CANCELLED)
21. (CANCELLED)
22. (CANCELLED)
23. (CANCELLED)
24. (CANCELLED)
25. (CANCELLED)
26. (CANCELLED)
27. (NEW) A method of determining a source of emissions, comprising the steps of:  
  
taking emission readings with sensors from a plurality of locations about a facility;  
  
monitoring changes in emission readings from the sensors and the direction of the emissions; and  
  
performing a spatial temporal emission concentration analysis to identify a source of emissions where the source of emissions is considered as a

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centroid and lines drawn from sensors detecting increased emissions in the direction of the increased emissions are assumed to cross at the source of emissions.